

IN THE UNITED STATES DISTRICT COURT  
FOR THE EASTERN DISTRICT OF PENNSYLVANIA

SMITHKLINEBEECHAM	:	CIVIL ACTION
CONSUMER HEALTHCARE, L.P.	:	
	:	
v.	:	
	:	
COLGATE-PALMOLIVE CO.	:	NO. 99-2533

**MEMORANDUM**

Giles, C.J.

December \_\_\_\_, 1999

This is a patent infringement case in which Smithkline Beecham Consumer Healthcare, L.P. (“Smithkline”) seeks to enjoin Colgate-Palmolive Co. (“Colgate”) from marketing a product which Smithkline contends infringes on its patent, U.S. Patent No. 5,651,158 (the “158 patent” or “the patent”). Jurisdiction is invoked pursuant to 28 U.S.C. § 1338(a).

Before the court is Colgate’s Motion for Partial Summary Judgment of Non-Infringement. For the reasons which follow, Colgate’s motion is granted.

**BACKGROUND**

**Material Facts**

In early June of 1999, Smithkline moved to enjoin Colgate from marketing its NAVIGATOR™ toothbrush, which Smithkline contended infringed its ‘158 patent covering certain flex-tip toothbrushes. Responding to Smithkline’s request for injunctive relief, Colgate moved for partial summary judgment of non-infringement pursuant to Rule 56 of the Federal Rules of Civil Procedure. By Order of June 16, 1999, Smithkline’s motion for a temporary

restraining order was denied after hearing.

## DISCUSSION

### Summary Judgment Standard

Summary judgment is proper when the “pleadings, depositions, answers to interrogatories, and admissions on file, together with the affidavits, if any, show that there is no genuine issue as to any material fact and that the moving party is entitled to a judgment as a matter of law.” Fed. R. Civ. P. 56(c). A fact is material if it might affect the outcome of the suit under governing substantive law. See Anderson v. Liberty Lobby, Inc., 477 U.S. 242, 248 (1986). In addition, a dispute about material facts must be “genuine” such that a reasonable jury could return a verdict for the nonmoving party. Id. The moving party has the initial burden of coming forward with proof of the absence of a genuine issue of material fact; however, if the nonmoving party fails to produce sufficient evidence with respect to an essential element of its claim and for which it will bear the burden of proof at trial, then the moving party is entitled to summary judgment. See Celotex Corp. v. Catrett, 477 U.S. 317, 322-23 (1986). Once the moving party has met its burden, the nonmoving party must come forward with specific facts contradicting those set forth by the moving party, thereby showing that there is a genuine issue for trial. See Matsushita Elec. Indus. Co. v. Zenith Radio Corp., 475 U.S. 574, 586-87 (1986). Although the court considers the nonmovant’s evidence as true and draws all reasonable inferences in the nonmovant’s favor, see Anderson, 477 U.S. at 255, the nonmovant “must do more than simply show that there is some metaphysical doubt as to the material facts.” Matsushita, 475 U.S. at 586.

## Analysis

A patent infringement analysis consists of two steps: (1) determining the meaning and scope of the patent claims asserted to be infringed and (2) comparing the properly construed claims to the device accused of infringing. Markman v. Westview Instruments, Inc., 52 F.3d 967, 976 (Fed. Cir. 1995), aff'd 517 U.S. 370 (1996). The first step of the patent analysis is commonly known as “claim construction” or “claim interpretation.” Markman, 52 F.3d at 976.

“[T]he Supreme Court has repeatedly held that the construction of a patent claim is a matter of law exclusively for the court.” Id. at 977. “The reason that the courts construe patent claims as a matter of law is straightforward: It has long been and continues to be a fundamental principle of American law that ‘the construction of a written evidence is exclusively with the court.’” Id. at 978 (quoting Levy v. Gadsby, 7 U.S. (3 Cranch) 180, 186 (1805) (Marshall, C.J.)). The patent is a fully integrated written instrument that, by statute, must provide a written description of the invention that will enable one of ordinary skill in the art to make and use it. Markman, 52 F.3d at 978. It follows, therefore, from the general rule applicable to written instruments that a patent is uniquely suited for having its meaning and scope determined entirely by a court as a matter of law. Id.

To perform claim interpretation, a court should consider: (i) the specification, *i.e.*, the written description of the invention that enables one of ordinary skill in the art to make and use the invention; (ii) the patent’s prosecution history, *i.e.*, the “undisputed public record” of proceedings in the Patent and Trademark Office, which is of primary significance in understanding the claims; and (iii) any extrinsic evidence, including expert and inventor testimony, dictionaries, and learned treatises, provided, that such evidence may not be used to

vary or contradict the plain meaning of the terms of the claims. Id. at 979-81. Finally, where the determination of patent infringement turns solely on the legal question of the proper construction of the claims, summary judgment is appropriate. Mantech Envtl. Corp. v. Hudson Envtl. Serv., Inc., 152 F.3d 1368, 1371 (Fed. Cir. 1998).

### Literal Infringement

To establish literal infringement of a patent, the patent owner must demonstrate that the accused device contains every limitation in the asserted claims. Elkay Mfg. Co. v. EBCOMfg. Co., 192 F.3d 973, 980 (Fed. Cir. 1999). If even one limitation is missing or not met as claimed, there is no literal infringement. WMSGaming, Inc. v. International Game Technology, 184 F.3d 1339, 1350 (Fed. Cir. 1999). In addition, if an accused device is found not to infringe an independent claim of the patented device, it must also be found not to infringe any claim dependent on the independent claim. See Wahpeton Canvas Co. v. Frontier, Inc., 870 F.2d 1546, 1552 n.9 (Fed. Cir. 1989) (“One who does not infringe an independent claim cannot infringe on a claim dependent on (and thus containing all the limitations of) that claim.”). Finally, summary judgment of no literal infringement of a patent is entirely appropriate if no reasonable factfinder could determine that the accused device meets every limitation of the properly construed claims. Elkay Mfg. Co., 192 F.3d at 980.

In the present case, the limitation of claim 1, and the dependent claim 3, require that “the opposite face of the [toothbrush’s] head hav[e] at least one groove formed therein.” (U.S. Patent #5,651,158 Abstract at col. 1 ln. 63-64). In simpler terms, the limitation is that the side of the toothbrush head opposite the bristle-bearing face must have a groove. Smithkline

contends that because the Colgate NAVIGATOR™ “retains two semicircular cut-outs at the edges of [its bristle-side] groove that allow [s] th[at] groove to be filled [with an] elastomer,” the NAVIGATOR™ groove is “‘formed’ at least in part in the non-bristle side of the brush” and, therefore, literally infringes the ‘158 patent. (Smithkline Opp’n Br. to Colgate Mot. for Summ. J. of Non-Infringement, at 38.)

There are two reasons why Smithkline’s argument fails. First, the ‘158 patent specifically and unambiguously gives Smithkline the patent right to toothbrushes whose “opposite face” has “at least one groove formed therein.” (U.S. Patent #5,651,158 Abstract at col. 1 ln. 63-64). The plain meaning of the term “groove” is a “long narrow channel or depression.” Webster’s Ninth New Collegiate Dictionary 538 (1988). Moreover, the deposition testimony of the Smithkline patent attorney, Dr. Walker, who drafted the ‘158 patent confirms that the nomenclature “groove” refers to a “[s]pace or a gap” with a bottom that does not penetrate both faces of the brush’s head. (Walker Dep. at 176-77.) Such a channel or depression is not present on the “opposite face” of the NAVIGATOR™ product. The Colgate toothbrush has two furrows which could qualify as “grooves.” However, these channels are conspicuously on the same side of the head as the bristles.

Second, a plain reading of the ‘158 patent limitation of an “opposite face” groove “formed therein,” necessarily requires that such a groove must be “in” the specified face. So, a “groove” that is, as Smithkline argues, “formed” during the manufacturing process but that is distinctly absent in the final product is not a “groove formed therein” under the unambiguous language of the ‘158 patent. The proposed Smithkline construction is completely inconsistent with the plainly expressed limitation of the patent. Such a reading would emphasize the

“formed” language of the patent and wrongly imply that Smithkline had patented a toothbrush groove production process. Instead, the limitation of the ‘158 properly focuses on the finished product’s groove location--“opposite face”--and groove characteristics--“formed therein.” Because the “opposite face” claim limitation is not present in the NAVIGATOR™, there is no literal infringement of the ‘158 patent. Accordingly, summary judgment is granted in favor of Colgate on Smithkline’s literal infringement claim.

#### Infringement under the Doctrine of Equivalents

Where the accused device does not literally infringe a claim, there still may be infringement under the “doctrine of equivalents.” Becton Dickinson & Co. v. C.R. Bard Inc., 922 F.2d 792, 797 (Fed. Cir. 1990). An accused product may infringe a claim “if it performs substantially the same function in substantially the same way to obtain the same result.” Graver Tank & Mfg. Co. Inc. v. Linde Air Prod. Co., 339 U.S. 605, 608 (1950). The doctrine of equivalents “has been ‘judicially devised to do equity’ in situations where there is no literal infringement but liability is nevertheless appropriate to prevent what is in essence a pirating of the patentee’s invention.” Loctite Corp. v. Ultraseal Ltd., 781 F.2d 861, 870 (Fed. Cir. 1985). “Thus, where an infringer, instead of inventing around a patent by making a substantial change, merely makes an insubstantial change, essentially misappropriating or even ‘stealing’ the patented invention, infringement may lie under the doctrine of equivalents.” London v. Carson Pirie & Scott, 946 F.2d 1534, 1538 (Fed. Cir. 1991).

As with literal infringement, infringement by equivalents must be applied on an element-by-element basis. See Pennwalt Corp. v. Durand-Wayland, Inc., 833 F.2d 931, 935

(Fed.Cir.1987), cert. denied, 485 U.S. 961 (1988). “Only if all limitations of the claim are satisfied at least equivalently can it be found that the two devices work in substantially the same way.” Becton, 922 F.2d at 798. Courts must be careful not to apply the doctrine in such a manner that it serves to broaden a limitation whereby the effect is to eliminate that element in its entirety and give the patentee more protection than it should be afforded. Warner-Jenkinson Co., Inc. v. Hilton Davis Chem. Co., 520 U.S. 17, 29 (1997). Further, “[a]rguments and amendments made to secure allowance of a claim, especially those distinguishing prior art... give rise to prosecution history estoppel.” Wang Lab., Inc. v. Mitsubishi Elecs., 103 F.3d 1571, 1578 (Fed. Cir. 1997) (citation omitted). Specifically, “[p]rosecution history estoppel prevents operation of the doctrine of equivalents from expanding a claim limitation to include subject matter surrendered during the patent’s prosecution.” Elkay Mfg. Co., 192 F.3d at 980. Finally, summary judgment of no infringement under the doctrine of equivalents is appropriate if no reasonable factfinder could determine that a claim limitation is met in the accused device by a substantial equivalent. Id. at 981.

Smithkline claims that even if the NAVIGATOR™ does not infringe literally, there is a genuine issue of fact as to whether the Colgate product infringes on the ‘158 patent under the doctrine of equivalents because it performs the same function in substantially the same way to achieve the substantially same result. (Smithkline Opp’n Br. to Colgate Mot. for Summ. J. of Non-Infringement, at 9.) Therefore, it argues, summary judgment is unwarranted. (Id.) Colgate counters that the groove placement, *i.e.*, whether the groove is located on the bristle face or the non-bristle face, necessarily forces the two brushes to flex in opposite directions and, as such, they cannot be said to perform in the “same way.” (Colgate Mot. for Summ. J. of Non-

Infringement, at 45-47) In opposition, Smithkline asserts that Colgate's groove placement is merely an insubstantial change in the Smithkline design and essentially a misappropriation of its patented invention. (Smithkline Opp'n Br. to Colgate Mot. for Summ. J. of Non-Infringement, at 9.) Indeed, Smithkline avers that its patent anticipates "flexure" in both directions in order to accomplish the "result" of the brush "accommodat[ing] itself to the different profiles of the different users' teeth," and that to deny a claim of infringement based on the brushes' varying "hinge geometry" would be manifestly unjust. (Smithkline Opp'n Br. to Colgate Mot. for Summ. J. of Non-Infringement, at 10.)

As previously noted, the doctrine of equivalents may not be used to broaden a patent element to the point that an express limitation is eliminated. Warner-Jenkinson, 520 U.S. at 29. Here, Smithkline is effectively asking the court to eliminate the "opposite face groove" limitation by adopting its position that a "groove" on either side of the toothbrush head compels the conclusion that the two brushes must behave in substantially the same way in order to achieve substantially similar results.

However, the operative definition for purposes of equivalency analysis, *i.e.*, does the accused product function in substantially the same way to achieve a similar result, must be determined *in the context of the language of the patent, the prosecution history, and the prior art.* Graver Tank, 339 U.S. at 609 (emphasis added). Smithkline's "theory of equivalence would entirely vitiate a particular claim element" of the patent. See Warner-Jenkinson, 520 U.S. at 39 n.8 (discussing propriety of summary judgment in patent case where theory of equivalence would eliminate claim element).

Indeed, the proffered construction is contrary to common experience and the



consistent expert testimony from both sides that different groove positions will yield varying flexibility characteristics in the heads of toothbrushes. Mr. Massari, an expert for Smithkline, admitted in his deposition that, “in the absence of other components,” “the location of the [groove] ha[s] an effect” on the flex characteristics of the toothbrush head. (Massari Dep. at 96-97.) Another Smithkline expert, Mr. Sahay, conceded that brushes made from identical materials would flex differently “depend[ing] on [the] construction of the joint.” (Sahay Dep. at 95)

Moreover, the vast array of variant design drawings, and the description thereof, produced in the studio of the Smithkline toothbrush inventor, Dr. Hans Halm, demonstrate that different groove locations render different degrees of resiliency in the toothbrush head. (Kennedy Decl. Ex. 21.) It is also clear from the record that a groove placed on one side of the head will necessarily render a tendency toward concave flexing, while a groove placed on the opposite side will facilitate convex flexing. (Norris Decl., at ¶¶ 5-12.)

So, even if the two toothbrushes are designed to promote the “substantially same result” and serve the “same function,” *i.e.*, promote better contact between the bristles and the surface of the different users’ teeth, the antithetical flex characteristics of the two brush heads cannot logically be said to function in “substantially the same way” under the doctrine of equivalents. If Smithkline’s broad construction of the claim were adopted, every flex-tip toothbrush would infringe under the doctrine of equivalents because such a brush, by definition, would necessarily perform the same function in the same general way with the same general results regardless of whether its groove was located on the brush’s “opposite face” or not.

The prosecution history of the ‘158 patent also precludes Smithkline’s doctrine of equivalents claim from surviving summary judgment. Courts are forbidden from using the

doctrine of equivalents to expand a claim limitation “to include subject matter [that was previously] surrendered during the patent’s prosecution.” Elkay Mfg. Co., 192 F.3d at 980. That is, “when an applicant narrows a claim element in the face of an examiner’s rejection based on the prior art, [that] applicant [is stopped] from later asserting that the claim covers, through the doctrine of equivalents, features that the applicant amended his claim to avoid.” Litton Sys., Inc. v. Honeywell, Inc., 140 F.3d 1449, 1462 (Fed. Cir. 1998). Further, when a patentee adds a limitation for the purpose of enhancing the patentability of his invention, such action also creates prosecution history estoppel. Ekchian v. Home Depot, Inc., 104 F.3d 1299, 1303-04 (Fed. Cir. 1997). Thus, it does not matter whether the patentee actually had to add a limitation to obtain the patent; it is merely sufficient that he did add one. Id.

With these principles in mind, it becomes clear that Smithkline’s conduct estopped it now from removing the “opposite face” limitation from the claims. The undisputed record shows that Smithkline initially attempted to secure a broad patent from both the U.S. Patent and Trademark Office (“PTO”) and European Patent Office (“EPO”) for a toothbrush with a bristle-bearing head “form[ed] of two or more segments flexibly and resiliently linked to each other.” (Kennedy Decl. Ex. 4, at 3) This attempt was rejected by both Offices in light of prior art. (Kennedy Decl. Ex. 11-12.) The record further shows that Smithkline subsequently chose to narrow its claim to cover only toothbrushes with their grooves positioned in the face “opposite” the bristle-bearing face. (Kennedy Decl. Ex. 4, at 1; Kennedy Decl. Ex. 6.) Indeed, Dr. Walker, the Smithkline attorney who actually prepared the amendments, testified in his deposition that the amendments were made, in the European case, “to overcome the rejections made in the international preliminary examination report which... cited [prior] art [that] prejudiced the

patentability of the broadest claim.” (Walker Dep. 159.) Moreover, Dr. Walker admits that he made “virtually the same amendment” to the U.S. application “at the same time” as the European application. ( Id. at 157 & 159.)

Although Smithkline contends that the U.S. amendments were made in response to rejection on other grounds (Smithkline Mem. in Opp’ to Mot. of Colgate for Summ. J. of Non-Infringement at 21.), when a patentee adds a limitation for the purpose of enhancing the patentability of his invention, such action also creates prosecution history estoppel. Ekchian v. Home Depot, Inc., 104 F.3d 1299, 1303-04 (Fed. Cir. 1997). Thus, it does not matter whether Smithkline actually had to add the limitation to obtain the patent; all that matters is that it did add one. Id. Thus, having made concessions as to the scope of the patent limitations, Smithkline is now stopped by prosecution history principles from using the doctrine of equivalents to regain what it previously surrendered. The court therefore grants summary judgment for Colgate on Smithkline’s claim for infringement under the doctrine of equivalents.

## **CONCLUSION**

The court grants Colgate's motion for partial summary judgment of non-infringement as to Smithkline's claim of literal infringement of the '158 patent as well as its claim of infringement thereof under the doctrine of equivalents.

An appropriate order follows.

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SMITHKLINE BEECHAM	:	
CONSUMER HEALTHCARE, L.P.	:	
	:	
v.	:	
	:	
COLGATE-PALMOLIVE CO.	:	CIVIL NO. 99-2533

**ORDER**

AND NOW, this \_\_\_\_ day of December, 1999, upon consideration of Defendant's Motion for Partial Summary Judgment of Non-Infringement, and the Plaintiff's responses in opposition, it is hereby ORDERED that Defendant's Motion for Partial Summary Judgment of Non-Infringement is GRANTED. It is further ORDERED that all pending motions are DENIED AS MOOT.

BY THE COURT:

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JAMES T. GILES                      C.J.

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